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ABSTRACT

This guide is intended for those who wish to study the literature dealing with various aspects of endangered plant species. This document includes the following sections, some of which are bibliographies: (1) "Introductions to the Topic"; (2) "Subject Headings" (for endangered species of plants used by the Library of Congress); (3) "General Texts"; (4) "Specialized Titles-By Geographic Area"; (5) "Related Titles"; (6) "Handbooks, Directories and Bibliographies"; (7) "State-of-the-Art Reviews and Conference Proceedings"; (8) "Government Publications"; (9) "Abstracting and Indexing Services"; (10) "Journals"; (11) "Representative Journal Articles"; (12) "Reports"; (13) "Selected Technical Reports"; (14) "Selected Materials"; and (15) "Additional Sources of Information". (CW)

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ENDANGERED SPECIES (PLANTS)

Compiled by Diana Niskern

TB 89-6 **August 1989**

SCOPE: Although plants are absolutely essential to human and animal life, endangered plants receive relatively little attention compared with that bestowed on endangered animals. The number of vascular plant species in the world is estimated at 250,000, with the majority growing in the tropics, where forests are rapidly being destroyed by human activities. Worldwide, at least 15 per cent of plant species may already be very rare or threatened with extinction, primarily through loss or degradation of habitat.

As many as 3,000 of the 25,000 species of plants native to the United States are considered at risk of extinction. Nearly three-fourths of the species in greatest danger of imminent extinction occur in California, Florida, Hawaii, Texas, and Puerto Rico.

Modern food crops have evolved through centuries of selection for desired characteristics. Only 20 species provide about 90 per cent of the world's food needs. These highly bred cultivated crops are vulnerable to changes in climate and to attack by new strains of diseases and pests. Thus it is essential to maintain wild plants and primitive crop varieties, either in protected areas or in gene banks, so that they may serve as source material for breeding improved or resistant varieties. These plants may also be useful as new crops in themselves or as sources of medicinal or industrial products.

This guide is intended for those who wish to study the literature dealing with various aspects of endangered plant species. Not meant to be a comprehensive bibliography, the guide is designed--as the name of the series implies--to put the reader "on target."

INTRODUCTIONS TO THE TOPIC

Durrell, Lee. State of the ark. Researched by IUCN. Garden City, N.Y., Doubleday, c1986. p. 90-97. QH75.D87 1986

SE 051 306

BEST COPY AVAILABLE

Huxley, Anthony Julian. Saving the plants that save us. In his Green inheritance: the World Wildlife Fund book of plants. Garden City, N.Y., Anchor Press/Doubleday, 1985. p. 174-187.
See also "Disappearing beauties": p. 144-145. QK50.H83 1985*

Mohlenbrock, Robert H. Why should we save our plants? Nature Conservancy magazine, v. 37, Nov./Dec. 1987: 4-9.
QH76.N33a and Pamphlet box*

SUBJECT HEADINGS used by the Library of Congress, under which books on endangered species of plants can be located in most card, book, and online catalogs, include the following:

RARE PLANTS (Highly relevant)
PLANT CONSERVATION (Highly relevant)
PLANTS--EXTINCTION (Relevant)
ENDANGERED SPECIES (More general)
BIOLOGICAL DIVERSITY CONSERVATION (Related)
GENE BANKS, PLANT (Related)
GERMPLASM RESOURCES, PLANT (Related)

GENERAL TEXTS

Koopowitz, Harold, and Hilary Kaye. Plant extinction: a global crisis. Washington, Stone Wall Press; Harrisburg, Pa., Distributed by Stackpole Books, c1983. 239 p. QK86.A1K66 1983*
Bibliographies: p. 227-232.

Our green and living world: the wisdom to save it. By Edward S. Ayensu and others. Washington, Smithsonian Institution; Cambridge, Eng., New York, Cambridge University Press, 1984. 255 p. QH75.093 1984
Bibliography: p. 248-249.

SPECIALIZED TITLES--BY GEOGRAPHIC AREA

Crow, Garrett E. New England's rare, threatened, and endangered plants. In collaboration with the New England Botanical Club Endangered Species Committee. Prepared for the United States Department of the Interior, Fish and Wildlife Service, Northeast Region in cooperation with the New Hampshire Agricultural Experiment Station, University of New Hampshire. Washington, The Service; For sale by the Supt. of Docs., U.S. Govt. Print. Off., 1982. 130 p. QK86.U6C76 1982 and Pamphlet box*
Bibliography: p. 119-123.

*Available in reference collection, Science Reading Room

Fisher, John. Wild flowers in danger. London, V. Gollancz, 1987. 194 p. QK86.G7F57 1987
Bibliography: p. 184-186.
Describes the rare plants of Great Britain and discusses measures to conserve them.

Given, David R. Rare and endangered plants of New Zealand. Wellington, Reed, 1981. 154 p. QK86.N45G577 1981
Bibliography: p. 146-149.

Inventory of rare and endangered vascular plants of California. Edited by James Payne Smith, Jr., and Ken Berg. 4th ed. Sacramento, California Native Plant Society, 1988. 168 p. (California Native Plant Society. Special publication, no. 1) QK86.U6I58 1988
Bibliography: p. 158-161.

List of rare, threatened, and endemic plants in Europe. By the Threatened Plants Unit (IUCN Conservation Monitoring Centre). 1982 ed. Strasbourg, European Committee for the Conservation of Nature and Natural Resources; Croton, N.Y., Manhattan Pub. Co. [distributor], 1983. 357 p. (Nature and environment series, no. 27) QK86.E85L57 1983

Mohlenbrock, Robert H. Where have all the wildflowers gone? A region-by-region guide to threatened or endangered U.S. wildflowers. New York, Macmillan; London, Collier Macmillan, c1983. 239 p. QK86.U6M63 1983*

Plant conservation in the Mediterranean area. Edited by C. Gomez-Campo. Dordrecht, Boston, W. Junk Publishers; Hingham, Mass., Distributors for the U.S. and Canada, Kluwer Academic Publishers, 1985. 269 p. (Geobotany, 7) QK86.M47P58 1985
Includes bibliographies.

Rare and endangered vascular plants of Maryland. Prepared by C. Rose Broome and others. Newton Corner, Mass., U.S. Fish and Wildlife Service, 1979, i.e. 1980. 64 leaves. QK86.U6R37
Bibliography: leaves 53-64.

St. John, Harold. Rare endemic plants of the Hawaiian islands. Edited by Carolyn A. Corn. Honolulu, State of Hawaii, Dept. of Land and Natural Resources, Division of Forestry and Wildlife, 1981- QK86.U6S75 1981
Includes bibliographical references.

Woodbury, Roy O. Rare and endangered plants of Puerto Rico: a committee report. Washington, U.S. Dept. of Agriculture, Soil Conservation Service in cooperation with the Department of Natural Resources, Commonwealth of Puerto Rico, 1975. 85 p. QK86.P9W66

RELATED TITLES

Conservation and commerce of cacti and other succulents. Edited by Douglas Fuller and Sarah Fitzgerald. Washington, Traffic (U.S.A.), World Wildlife Fund, c1987. 264 p. SB438.3.C66 1987
Includes bibliographies.

Conservation biology: the science of scarcity and diversity. Edited by Michael E. Soulé. Sunderland, Mass., Sinauer Associates, c1986. 584 p. QH75.C664 1986*
Bibliography: p. 521-570.

Gene banks and the world's food. Donald L. Plucknett and others. Princeton, N.J., Princeton University Press, c1987. 247 p. SB123.3.G46 1987*
Bibliography: p. 209-231.

Genetics and conservation: a reference for managing wild animal and plant populations. Edited by Christine M. Schonewald-Cox and others. Menlo Park, Calif., Benjamin/Cummings, 1983. 722 p. QH75.G45 1983
Bibliography: p. 525-570.

Myers, Norman. A wealth of wild species: storehouse for human welfare. Boulder, Colo., Westview Press, 1983. 274 p. QH75.M93 1983
Bibliography: p. 229-254.

Seeds and sovereignty: the use and control of plant genetic resources. Edited by Jack R. Kloppenburg, Jr. Durham, N.C., Duke University Press, 1988. 368 p. SB123.3.S44 1988
"Published in cooperation with the American Association for the Advancement of Science."
Includes bibliographies.

HANDBOOKS, DIRECTORIES and BIBLIOGRAPHIES

Ayensu, Edward S., and Robert A. DeFilipps. Endangered and threatened plants of the United States. With the assistance of Sam E. Fowler and others. Washington, Smithsonian Institution, 1978. 403 p. QK86.U6A93 1978*
Ed. of 1975, by the Smithsonian Institution, published under title Report on endangered and threatened plant species of the United States.
Includes bibliographies.

The IUCN plant red data book: comprising red data sheets on 250 selected plants threatened on a world scale. International Union for Conservation of Nature and Natural Resources; compiled by Gren Lucas and Hugh Synge for the Threatened Plants Committee of the Survival Service Commission of IUCN, with the help and advice of experts throughout the world. Morges, Switzerland, IUCN, 1978. 540 p. QK86.A1I9 1978*
Includes bibliographies.

Maclean, Jayne T. Endangered species of plants, January 1984-January 1989. Beltsville, Md., U.S. Dept. of Agriculture, National Agricultural Library, 1989. 19 p. (Quick bibliography series, 89-47) Pamphlet box*

Miasek, Meryl A., and Charles R. Long. Endangered plant species of the world and their endangered habitats: a compilation of the literature. Rev. and enlarged ed. Bronx, N.Y., New York Botanical Garden Library, 1985. 153 p. (Plant bibliography, no. 6) Z5354.P73M53 1985

1988 Plant conservation resource book. Compiled by Linda R. McMahan with the assistance of Ruth Flanagan and Heike Striebeck. Jamaica Plain, Mass., Center for Plant Conservation, 1988. 96 p. Pamphlet box*

Lists federal and state contacts, state laws and regulations, and citations to rare plant lists for each state.

Plants in danger: what do we know? Stephen D. Davis and others. Gland, Switzerland, International Union for Conservation of Nature and Natural Resources, 1986. 461 p. QK86.A1P58 1986*

For each country and island group, provides a summary of its floristics and vegetation, then selectively lists checklists and floras, field guides, information on threatened plants, laws protecting plants, voluntary organizations, botanic gardens, useful addresses, and additional references.

Wood, Don A. Endangered species: concepts, principles, and programs: a bibliography. Tallahassee, Florida Game and Fresh Water Fish Commission, 1981. 228 p. Z7994.W5W66 1981

STATE-OF-THE-ART REVIEWS and CONFERENCE PROCEEDINGS

Audubon wildlife report. 1985- New York, National Audubon Society. annual. QL84.2.A9*

See particularly species accounts and, in appendices, endangered species lists.

The Biological aspects of rare plant conservation. Edited by Hugh Synge. Chichester, Eng., New York, Wiley, c1981. 558 p. QK86.A1B56

Proceedings of an international conference held at King's College, Cambridge, July 14-19, 1980, and sponsored by the Linnean Society of London and the Botanical Society of the British Isles. Includes bibliographies.

Botanic gardens and the world conservation strategy: proceedings of an international conference, 26-30 November 1985, held at Las Palmas de Gran Canaria. Edited by D. Bramwell and others. London, Orlando, Published for IUCN by Academic Press, 1987. 367 p. QK71.B653 1987

Conference on the Conservation and Management of Rare and Endangered Plants (1986, Sacramento, Calif.). Conservation and management of rare and endangered plants: proceedings of a California Conference on the Conservation and Management of Rare and Endangered Plants. Edited by Thomas S. Elias. Sacramento, Calif., California Native Plant Society, c1987. 630 p. QK86.U6C66 1986
Includes bibliographies.

Extinction is forever: threatened and endangered species of plants in the Americas and their significance in ecosystems today and in the future: proceedings of a symposium held at the New York Botanical Garden, May 11-13, 1976, in commemoration of the Bicentennial of the United States of America. Edited by Ghillean T. Prance and Thomas S. Elias. Bronx, N.Y., New York Botanical Garden, c1977. 437 p. QK86.A13E94
"Endangered plant species of the world and their endangered habitats: a selected bibliography, compiled by C. R. Long and M. A. Miasek": p. 389-395.

Plant genetic resources: a conservation imperative. Edited by Christopher W. Yeatman, David Kafton, Garrison Wilkes. Boulder, Colo., Published by Westview Press for the American Association for the Advancement of Science, Washington, 1984. 164 p. (AAAS selected symposia series, 87) SB123.3.P63 1984
"Based on a symposium that was held at the 1981 AAAS National Annual Meeting in Toronto, Ontario, January 3-8 ... sponsored by AAAS Section G (Biology)".
Includes bibliographies.

Rare plant conservation: geographical data organization. Edited by Larry E. Morse and Mary Sue Henifin. Bronx, N.Y., New York Botanical Garden, 1981. 377 p. QK86.A1R37 1981
Based on the presentations and discussions at a conference sponsored by the U.S. National Park Service and held in Nov. 1977 at the New York Botanical Garden.
Includes bibliographies.

Regional Workshop on Conservation of Tropical Plant Resources in South-East Asia (1982, New Delhi, India). Conservation of tropical plant resources: proceedings of the Regional Workshop on Conservation of Tropical Plant Resources in South-East Asia, New Delhi, March 8-12, 1982. Edited by S. K. Jain and K. L. Mehra. Howrah, India, Botanical Survey of India, Dept. of Environment, Govt. of India, c1983. 253 p. QK86.A735R44 1982

GOVERNMENT PUBLICATIONS

An Atlas and illustrated guide to the threatened and endangered vascular plants of the mountains of North Carolina and Virginia. J. R. Massey and others. Asheville, N.C., Southeastern Forest Experiment Station, 1983. 218 p. (General technical report SE, 20) QK86.U6A85 1983
Includes bibliographies.

Convention on international trade in endangered species of wild fauna and flora. 1980- Washington, Federal Wildlife Permit Office, U.S. Fish and Wildlife Service, U.S. Dept. of the Interior. annual. QL81.5.U54a
Title varies slightly.

Endangered and threatened wildlife and plants: 50 CFR 17.11 and 17.12. 1986- Washington, Dept. of the Interior, U.S. Fish and Wildlife Service. annual. QL81.5.E53*
A compilation and special reprint of 50 CFR 17.11 and 17.12, as well as all published final rules that have subsequently appeared in the Federal register.

Grassroots conservation of biological diversity in the United States: background paper #1. Washington, Congress of the U.S., Office of Technology Assessment; For sale by the Supt. of Docs., U.S. Govt. Print. Off., 1986. 67 p. QH76.G73 1986
"OTA-BP-F-38."

Little, Elbert Luther. Rare and local conifers in the United States. Washington, U.S. Dept. of Agriculture, Forest Service; U.S. Govt. Print. Off., 1975. 25 p. (Conservation research report, no. 19) S950.U55 no. 19

ABSTRACTING AND INDEXING SERVICES that index relevant journal articles and other literature on endangered plants are listed below. Some suggested terms are given as aids in searching.
The following indexes are available in most public and college libraries.

Biological & Agricultural Index (1916-) Z5073.A46*
See: Plants, Rare
Plants, Extinct
Plant Conservation

General Science Index (1978-) Z7401.G46*
See: Plants, Rare
Plants, Extinct
Endangered Species Legislation

Magazine Index Available in several formats in LC
See: Rare Plants
Endangered Species
Plant Conservation
Plants--Extinction

Note: Consult reference librarian for location of abstracting and indexing services in the Science Reading Room

Readers' Guide to Periodical Literature (1900-) AI3.R45
See: Rare Plants
Endangered Species Act
Plants, Extinct

The following abstracting and indexing services, which should be used for more exhaustive searches, may be available only in large or specialized libraries.

Biological Abstracts (1926-) QH301.B37*
See keywords of interest in the Subject, Biosystematic, and Generic Indexes

Biology Digest (1974-) QH301.B44*
See: Endangered Species

Ecology Abstracts (1975-) QH540.A66*
See: Endangered Species
Rare Species

Environment Index (1971-1987) Z5322.E2E57* and Environment Abstracts Annual (1988-) GF1.E553*
See: Endangered Species--Plant
Names of individual species

Index to Legal Periodicals (1926-) K9.N32
See: Endangered Species

Wildlife Review (1935-) SK351.W58*
See: Endangered and Threatened Species

JOURNALS that often contain relevant articles include the following:

Audubon QL671.A82
Biological Conservation S900.B5
BioScience QH1.A277
Conservation Biology QH75.A1C665
Defenders S960.D43
Endangered Species Update uncataloged
Each issue includes a reprint of the latest Endangered Species Technical Bulletin.
Fremontia (California Native Plant Society) QK149.F73
Garden (Garden Society, New York) SB1.G18
International Wildlife QL81.5.I56
Kew Magazine QK1.K46
National Wildlife S964.U6N35
Natural Areas Journal QH76.J68
Nature Conservancy Magazine QH76.N33a
Oryx QL81.5.O79

REPRESENTATIVE JOURNAL ARTICLES

Coggins, George Cameron, and Anne Fleishel Harris. The greening of American law? The recent evolution of Federal law for preserving floral diversity. Natural resources journal, v. 27, spring 1987: 247-307. K14.A868

Dusek, Karen H. Update on our rarest pine. American forests, v. 91, Nov. 1985: 26-29, 61, 63. SD1.A55
Torrey pine.

Falk, Donald A., and Linda R. McMahan. Endangered plant conservation: managing for diversity. Natural areas journal, v. 8, Apr. 1988: 91-99. QH76.J68

Falk, Donald A., and Kerry S. Walter. Networking to save imperiled plants. Garden, v. 10, Jan./Feb. 1986: 2-6, 32. SB1.G18

Knight, Frank. Rare and protected: plants that need help. Conservationist, v. 41, May/June 1987: 2-9. QH76.5.N7C66
Gives examples from New York State.

Mehrhoff, Loyal A. Reproductive vigor and environmental factors in populations of an endangered North American orchid, Isotria medeoloides (Pursh) Rafinesque. Biological conservation, v. 47, no. 4, 1989: 281-296. S900.B5

Meijer, Willem. Saving the world's largest flower. National geographic, v. 168, July 1985: 136-140. G1.N27
Rafflesia arnoldii.

Nelson, James R. Rare plant surveys: techniques for impact assessment. Natural areas journal, v. 5, July 1985: 18-30. QH76.J68

Noss, Reed F. The longleaf pine landscape of the southeast: almost gone and almost forgotten. Endangered species update, v. 5, Mar. 1988: 1-8. Pamphlet box*

Oldfield, Sara. Conservation of rare & endangered bulbs. Kew magazine, v. 1, Apr. 1984: 23-29. QK1.K46

Palmer, Mary E. A critical look at rare plant monitoring in the United States. Biological conservation, v. 39, no. 2, 1987: 113-127. S900.B5

Read, Mike. Bromeliads threatened by trade. Kew magazine, v. 6, Feb. 1989: 22-29. QK1.K46

Viswanathan, T. V. Endangered tree species in northern Ethiopia. Environmental conservation, v. 13, spring 1986: 71-72. TD169.E58

Waller, D. M., D. M. O'Malley, and S. C. Gawler. Genetic variation in the extreme endemic Pedicularis furbishiae (Scrophulariaceae). Conservation biology, v. 1, Dec. 1987: 335-340. QH75.A1C665

REPORTS and other types of literature are indexed in the following guides:

Government Reports Announcements & Index (1946-) Z7916.G78*
See: Endangered Species

Monthly Catalog of United States Government Publications (1895-) Z1223.A18*
See: Endangered Species
Rare Plants

SELECTED TECHNICAL REPORTS, sold by the National Technical Information Service, Springfield, Virginia 22161, include the following:

Bratton, Susan P. Preliminary status of rare plants in Great Smoky Mountains National Park. Gatlinburg, Tenn., Uplands Field Research Lab., Great Smoky Mountains National Park, Mar. 1979. 46 p. PB83-110726**
"NPS/R/RM-25."

McCoy, Earl D. Rare, threatened, and endangered plant species [of] southwest Florida and potential OCS activity impacts. Performed for National Coastal Ecosystems Team, Biological Services Program, Fish and Wildlife Service, U.S. Department of the Interior. Washington, The Team, 1981. 83 p.
QK86.U6M38 1981 and PB82-182452**

Menges, Eric S., Susan C. Gawler, and Donald M. Waller. Population biology of the endemic plant, Furbish's lousewort (Pedicularis furbishiae)--1984 research. Indianapolis, Ind., Holcomb Research Institute, Apr. 1985. 126 p. PB87-172052**

Mohlenbrock, Robert H. Inventory of endangered plants, St. Louis District. Carbondale, Ill., Biotic Consultants, Inc., 1977. 56 p. AD-A131 186**

SELECTED MATERIALS available in the Science Reading Room pamphlet boxes include:

Ashton, Peter S. Conservation of biological diversity in botanical gardens. In National Forum on BioDiversity (1986, Washington, D.C.). Biodiversity. E. O. Wilson, editor. Washington, National Academy Press, 1988. p. 269-278.

**Available in Microform Collection, Science Reading Room

Campbell, Faith T. Boycotting the wild-plant trade. Garden, v. 12, Jan./Feb. 1988: 2-5, 32.

Durant, Mary. The hazardous life of our rarest plants. Audubon, v. 87, July 1985: 50-61.

Elias, Thomas S. Rare and endangered species of plants--the Soviet side. Science, v. 219, Jan. 7, 1983: 19-23.

Esquinas-Alcázar, José T. Plant genetic resources: a base for food security. Ceres, v. 20, July/Aug. 1987: 39-45.

Fitzgerald, Sarah Gates. The state of the states in plant protection. Garden, v. 10, Sept./Oct. 1986: 2-5, 31-32.

Huenneke, Laura F. Managing land to protect rare plant populations. Fremontia, v. 16, July 1988: 3-8.

Kite, Pat. Palm bank yields high interest. Garden, v. 12, July/Aug. 1988: 10-12, 14-15.

Lewin, Roger. How to get plants into the conservationists' ark. Science, v. 244, Apr. 7, 1989: 32-33.

Mohlenbrock, Robert H. Token plant protection '88. Garden, v. 13, July/Aug. 1989: 22-25, 32.

Morse, Larry E. Rare plants of Appalachian bedrock. Nature Conservancy magazine, v. 38, Mar./Apr. 1988: 28-30.

Reznicek, Anton A. Are small reserves worthwhile for plants? Endangered species update, v. 5, Dec. 1987: 1-3.

Tanner, Ogden. The flowers that afflict us with 'a sort of madness.' Smithsonian, v. 16, Nov. 1985: 168-170, 172, 174-181, 243.
About orchids.

ADDITIONAL SOURCES OF INFORMATION

Center for Plant Conservation
125 Arborway
Jamaica Plain, Massachusetts 02130
Telephone: (617) 524-6988

Defenders of Wildlife
1244 19th Street, N.W.
Washington, D.C. 20036
Telephone: (202) 659-9510

The Nature Conservancy
1815 North Lynn Street
Arlington, Virginia 22209
Telephone: (703) 841-5300

World Wildlife Fund
1250 24th Street, N.W.
Washington, D.C. 20037
Telephone: (202) 293-4800